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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/089,732	04/03/2002	Tino Kirschner	ZAHFRI P437US	2713

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EXAMINER

HO, HA DINH

ART UNIT PAPER NUMBER

3681

DATE MAILED: 05/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/089,732

Applicant(s)

KIRSCHNER, TINO

Examiner

Ha D. Ho

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 April 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 April 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: *Exhibits 1 and 2*.

DETAILED ACTION

1. This is the first Office Action on the merits of Application No. 10/089,732 filed on 04/03/02. Claims x are currently pending.
2. Receipt is acknowledged of the Preliminary Amendment filed on 04/03/02. Claims 1-11 have been canceled, and new claims 12-22 have been added accordingly. Claims 12-22 are currently pending.

Drawings

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the feature of "*an end face of the planetary bearing pin (38) abuts against inner bearings of planetary carrier bearing (30, 32)*" in claim 16, and the feature of "a spring-disc coupling" in claim 21 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. Regarding claim ¹⁶~~12~~, as seen, there is a gap between the pin end face and the planetary carrier inner bearing.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

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The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 21 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 21 recites the feature of the sun gear shaft being fitted so that it cannot move axially relative to the housing. Further, claim 21 recites a spring-disc coupling for compensating the axial displacements between the sun gear shaft and the output shaft of the electromotor. It is unclear as to how the sun gear shaft can move axial while it is fitted, i.e., it cannot move axially, as recited in claim 21.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 12-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The recitation of "an axial section", in claim 12, line 12, constitutes a double inclusion since "an axial section" was previously recited in claim 12, line 8.

The recitation of "reduced outer diameter", in claim 12, line 13, constitutes a double inclusion since "reduced outer diameter" was previously recited in claim 12, line 9.

The recitation of "a functional surface", in claim 19, line 3, constitutes a double inclusion since "a functional surface" was previously recited in claim 17, line 3.

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Claim 22 recites the limitation “the functional surface (26) of the sun gear shaft” in line

2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 12-14 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Friedrich (DE 4241550).

Friedrich’550 teaches a planetary gear having planetary wheels (4) fitted in a rotating planetary carrier that forms an output (5), a sun gear (A) (see Exhibit 1), an annular gear (2a), a housing (2), a rotating sun gear shaft (B) (see Exhibit 1), which is hollow in a receiving area (C) (see Exhibit 1) to receive an output shaft of an electromotor, a sealing element (16), and a bearing (D) (see Exhibit 1) for the sun gear shaft positioned in the planetary carrier, wherein the diameter of a functional surface of the sun gear shaft (B) is smaller than the diameter of the bore in the receiving area (C) (see Exhibit 1).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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11. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Friedrich (DE 4241550) in view of Fritsch (US 3,315,547).

Friedrich'550 shows the bearing (D) for the sun gear shaft located outside, not at least partly within, the space occupied by the planetary carrier bearing (E) (see Exhibit 1). Fritsch'547 show a planetary gear (see Fig. 1) having a bearing (F) (see Exhibit 2) for the sun gear shaft (11) located radially inside and at least partly within the space occupied by an inner ring of a planetary carrier bearing (G) (see Exhibit 2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to relocate the bearing for the sun gear shaft of Friedrich'550 such that it is located at least partly within the inner ring of the planetary carrier bearing as shown by Fritsch'547, since shifting the bearing for the sun gear shaft to a different position would not modify the operation of the device. The courts have held that shifting location of parts would have been an obvious expedient (*In re Japikse*, 86 USPQ 70 (CCPA 1950)).

12. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Friedrich (DE 4241550) in view of Bayer (DE 19821813).

Friedrich'550 shows the bearing (D) for the sun gear shaft fitting into the carrier without a circlip received in a groove. Bayer'813 show a planetary gear having the bearing (4) and the circlip received in the groove (see Fig. 1), the circlip is for keeping the bearing from axially movement. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide groove on the carrier of Friedrich'550 and provide the circlip received in the groove in view of Bayer'813 in order to keep the bearing from axially movement.

13. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Friedrich (DE 4241550) in view of Gotman (US 4,991,473).

Friedrich'550 does not show an elastic element for compensating the axially displacement of the sun gear shaft. Gotman'473 show a planetary gear (40) having planet gears (42) meshing with the ring gear (410 and the sun gear (38), wherein the sun gear shaft (37) is mounted so that it can be axially displaced against the restoring force action of an elastic compensating element (62). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the planetary gear of an elastic element Friedrich'550 for compensating the axially displacement of the sun gear shaft as shown by Gotman'473 in order to reduce the vibration in the planetary gear.

Allowable Subject Matter

14. Claims 16, 19 and 20 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Cited Prior Art

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Hiersig et al.'465, Jacqui'136, Kusumoto et al.'879, anderson'272, and tsugawa'738 which each shows a planetary gear unit.

Communication

16. Submission of your response by facsimile transmission is encouraged. Group 3600's facsimile number is (703) 305-3597. Recognizing the fact that reducing cycle time in the processing and examination of patent applications will effectively increase a patent's term, it is to your benefit to submit responses by facsimile transmission whenever permissible. Such submission will place the response directly in our examining group's hands and will eliminate Post Office processing and delivery time as well as the PTO's mail room processing and delivery

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time. For a complete list of correspondence not permitted by facsimile transmission, see M.P.E.P. 502.01. In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but charging such fee to a deposit account, can be submitted by facsimile transmission. Responses requiring a fee which applicant is paying by check should not be submitting by facsimile transmission separately from the check. Responses submitted by facsimile transmission should include a Certificate of Transmission (M.P.E.P. 512). The following is an example of the format the certification might take:

I hereby certify that this correspondence is being facsimile transmitted to
the Patent and Trademark Office (Fax No. (703) 305-3597) on _____
(Date)

Typed or printed name of person signing this certificate:

(Signature)

If your response is submitted by facsimile transmission, you are hereby reminded that the original should be retained as evidence of authenticity (37 CFR 1.4 and M.P.E.P. 502.02). Please do not separately mail the original or another copy unless required by the Patent and Trademark Office. Submission of the original response or a follow-up copy of the response after your response has been transmitted by facsimile will only cause further unnecessary delays in the processing of your application; duplicate responses where fees are charged to a deposit account may result in those fees being charged twice.

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Examiner Ho whose telephone number is (703) 305-0738. The examiner can normally be reached on Monday-Friday from 7:30 A.M. to 5:00 P.M. Eastern Standard Time. If attempts to reach the examiner by phone are unsuccessful, the examiner's supervisor, Mr. Charles Marmor, can be reached at (703) 308-0830. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-2168.

Ha Ho 5/19/03

Ha Ho
Patent Examiner
Art Unit 3681